

THE COLUMBIAN UNIVERSITY.

PRESIDENT'S
ANNUAL REPORT

FOR THE

Year 1892-1893.

WASHINGTON, D. C.:
JUDD & DETWEILER, PRINTERS,
1893.

*The Honorable and Reverend the Overseers and
Trustees of the Columbian University:*

I have the honor herewith to submit my report on the operations of the University in all its departments during the scholastic year 1892-'93.

At the threshold of this report I cannot omit to exchange congratulations with you on the final establishment of our School of Graduate Studies, destined hereafter to compose not only an integral part, but also the crowning complement of our University System. The particular steps which have been taken in the realization of this forward movement were authorized by the corporation at its last annual meeting, when the following resolution was adopted:

"Resolved, That it shall be the duty of the members of the Faculty in the Columbian College to devise schemes of graduate studies in their respective departments, and to report the same to the Board of Trustees during the coming scholastic year, with a specification of the term through which such studies shall extend, tuition fees, &c., and that the same duty be enjoined on the Faculties of the Medical School and of the Coreoran Scientific School."

It is, however, only just to say that the seminal idea of such a school for the propagation of advanced learning dates almost from the origin of the institution. As early as the year 1822, Luther Rice, who deserves to be held in lasting honor as the "Founder" of the Columbian College, had projected an "annex" to the College, to be called the "Philosophical Department," in which special provision should be made for the cultivation of "advanced studies" beyond the limits of the ordinary college curriculum. This project was formally approved in 1823, when a circular was addressed by the Board of Trustees to all military and naval officers of the United States, invoking their assistance in collecting illustrative materials and specimens for the use of the institution. The national character of the College and the "university" range of its proposed studies were thus emphasized at the beginning of the enterprise.

In further pursuit of this plan the Trustees, in 1824, addressed a memorial to Congress soliciting national aid in the endowment of the College. In support of their plea the Board of Trustees invited the attention of Congress to the fact that though the College had been "originated by the Baptist General Convention," it was meant to be of "national locality, consideration, and benefit," and was founded "on the most liberal principles." In evidence of this latter fact they cited the terms of the seventh clause in the charter, declaring that "persons of every religious denomination shall be capable of being elected Trustees; nor shall any person, either as President, professor, tutor, or pupil, be refused admittance into said College, or denied any of the privileges, immunities, or advantages thereof for or on account of his sentiments in matters of religion."

These projects were nipped in the bud by the financial embarrassments which overtook the College in 1827, and which for a time threatened its very existence; but they were never abandoned. Even under the storm and stress of our civil war the Board of Trustees proceeded to enlarge their plans for professional education by organizing a Law School, in addition to the Medical School, which latter dates from the year 1821. In the year 1871 the Board of Trustees announced that it was their purpose "to increase the number of these schools, so as to represent every department of learning needful to the formation of a University as broad in its endowments, in its plans of instruction, and its field of duty as the wants of the great people in whose centre and capital it will be placed."

I need not say that from the first I have been in hearty sympathy with these plans of the authorities, and, in evidence of the fact, I may recall the following words of my Inaugural Address:

"It is not enough for educators, in the higher walks of their art, to preserve and propagate the elements of knowledge; but they are bound so to impart these elements, in all their fitness and vitalizing power, as to create the conditions of a growing advancement in learning and civilization. To accomplish these great objects the teacher must have equal regard to the number and quality of the subjects taught, and to the method, and order, and spirit of his instructions. 'Teachers,' says Bacon, 'are not ordained for transitory uses, but for the progression of the sciences—*ad sufficiendam sobolem scientie in secula.*' * * *

"And what advantages are ours, both for gaining and diffusing the blessings of highest culture? For here, at our very doors, we have the Smithsonian Institution, perpetually working, under the guidance of its illustrious Secretary [then the late Professor Joseph Henry], on the boundaries of knowledge in all departments, thus literally fulfilling the will of its founder and exemplifying the highest function of a university, by increasing and diffusing knowledge among men; and here is the National Library of Congress, with its well-filled alcoves, open alike to teachers and scholars for purposes of literary or scientific research; and here, for the study of technology, are the accumulated fruits of American inventive genius stored in the Patent Office; and here, for the progressive scientific study of astronomy, is the National Observatory; and here is that no less learned than useful school of practical geometers connected with the Coast Survey; and here are the gardens which, under the keeping of the Agricultural Department, invite to the study of botany, not in dry herbaria and in dryer tomes, but amid flowery walks, through which Shenstone would have loved to ramble by the side of Linnaeus or Hasselquist; and here, for the student of law, are the highest seats of our American Themis, as here, for the votaries of the healing art, are the priceless treasures of the Medical Museum, without any rival in the world among institutions of its kind; and here, by the munificence of him who stands at the head of our governing board, is the Corcoran Gallery of the Fine Arts, to keep alive the love of beauty in the soul of man."

In 1872 the corporation of the institution was reconstructed and was made a self-perpetuating body, composed of Trustees who shall be inhabitants of the District of Columbia and of Overseers who may be residents in any part of the country. In 1873 the institution was by act of Congress erected into the Columbian University, and all restrictions previously placed on the amount of its annual income were removed. Notwithstanding the financial paralysis which fell on the country in 1873, the corporation, through the munificence of Mr. Corcoran, succeeded in raising what is known as the "Corcoran Endowment Fund"—a fund which, though small, continues to be the solid foundation on which the University rests to-day for support in meeting the running expenses of its administration. In 1879, with a view to the enlargement of its educational scope by placing itself abreast with the educational facilities of the National Capital, the corporation resolved to concentrate all its departments "in the heart of Washington." In 1882 the present University

site was purchased. In 1884 the plan of the "Coreoran Scientific School" was formally approved, and the school was opened in October of that year. In 1887 the Dental School was established in connection with the Medical School. Meanwhile redoubled efforts were put forth by the corporation to attract the attention of benefactors of learning to the unparalleled facilities offered by the city of Washington as the site and seat of a great *University* in the highest sense of that term. Much of consideration and of sympathy was given to these representations by men of "light and leading" in all parts of the land. The evidence of the fact has been placed before you in my former annual reports; but no large sums have as yet been placed at the command of the University for the fulfillment of its designs. In full faith that such sums will be ultimately furnished by the enlightened friends of learning, the corporation at its last annual meeting resolved to give public proof of its own belief in the "unparalleled facilities" offered in Washington for the promotion of university learning by proceeding *at once* to organize its proposed "School of Graduate Studies." The result is before you in a Faculty qualified to give graduate instruction in English, in Greek, in Latin, in French, in German, in Mathematics, in History, in Speculative Philosophy, in the Philosophy of History, in Solar Physics, in Mathematical Physics, in Theoretical Astronomy, in Astro-Physics, in General Chemistry, in Mineral Chemistry, in Agricultural Chemistry, in Bio-Chemistry, in Zoölogy, in Histology, in Anthropology, in Osteology and Artistic Anatomy, in Meteorology, in Geology, in Civil Engineering, and in Electrical Engineering. It does not need to be said that such an achievement could not have been effected without the generous coöperation of eminent scientific men, resident in Washington, who gave their cheerful support to our plans; while the enterprise would have been chimerical in any city less opulent than Washington in all the "facilities" which promote original research and advanced study in nearly every department of literature, art, and science. For the high grade of these advanced studies and for the honorable repute of the teachers enrolled in the new Faculty, I need but refer you to the pages of the Annual Catalogue.

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The measures taken in the organization of the Graduate School, since the date of your last annual meeting, have imposed great labor on the Faculties who were charged with concerting the necessary preliminary arrangements. The result of these deliberations was communicated to the Board of Trustees on the 14th of March last, when the provisional organization of the Graduate School was reported for approval. As the organization of the new school was made mandatory by the corporation at the last annual meeting, the Board of Trustees was already empowered to carry out the instructions of the corporation under this head, but the result of these deliberations was reported to the overseers resident in Baltimore at an informal meeting invited by the President of the University for the purpose of making these communications. Similar communications were made in writing to the overseers resident in New York. But it will now be necessary that the corporation should give its formal sanction and approval to so much of these proceedings as shall be found to have been taken in pursuance of the instructions given at the last annual meeting.

The additions made to the Faculties, as authorized by the Board of Trustees at the date of the special meeting in March, were as follows :

- GENERAL A. W. GREELY, U. S. A.,
Professor of Geography.
- PROFESSOR ASAPH HALL, LL. D.,
Professor of Mathematical Astronomy.
- PROFESSOR FRANK H. BIGELOW, A. M., &C.,
Professor of Solar Physics.
- PROFESSOR ALEXANDER S. CHRISTIE, LL. M.,
Professor of Mathematical Physics.
- PROFESSOR F. W. CLARKE, S. B.,
Professor of Mineral Chemistry.
- PROFESSOR HARVEY W. WILEY, M. D., PH. D.,
Professor of Agricultural Chemistry.
- EDWIN E. HARRIS, A. M.,
Assistant in Chemistry.
- THOS. M. CHATARD, PH. D.,
Lecturer on Chemical Engineering.
- JOSIAH PIERCE, JR., A. M.,
Lecturer on Topographical Surveying.

CHARLES W. STILES, PH. D.,
 Instructor in Histology.
 G. E. CURTIS, A. M.,
 Assistant in Meteorology.
 CABELL WHITEHEAD, B. M.,
 Assistant in Assaying.
 FRANK L. AVERILL, C. E.,
 Assistant in Field Engineering.
 HENRY R. PYNE,
 Assistant in Latin.
 M. M. RAMSEY,
 Assistant in Spanish.
 HERBERT L. RICE,
 Assistant in Astronomy.
 E. L. THURSTON,
 Assistant in Engineering.
 GEORGE N. CHANDLER,
 Assistant in Mineralogy and Geology.
 J. S. JOINSON,
 Assistant in Applied Mathematics.
 J. S. LEMON, PH. D.,
 Lecturer on Psycho-Physics.
 CYRUS ADLER, PH. D.,
 Lecturer on Oriental History.
 SEÑOR ANTONIO M. SOTELDO, LL. D.,
 Professor of Spanish.

Professor Asaph Hall having been compelled to decline his appointment as professor of Theoretical Astronomy because of his contemplated absence from Washington during the next year, it is respectfully recommended that Professor Edgar Frisby, of the United States Naval Observatory, be elected in his stead. With this change and with other changes and additions, it is recommended that the Faculty of the Graduate School be constituted as follows:

JAMES C. WELLING, LL. D., PRESIDENT,
 Professor of History.
 CHARLES E. MUNROE, S. B., DEAN,
 Professor of Chemistry.
 THE REV. ADONIRAM J. HUNTINGTON, D. D.,
 Professor of Greek.
 THE REV. SAMUEL M. SHUTE, D. D.,
 Professor of English.

- ANDREW P. MONTAGUE, A. M., PH. D.,
Professor of Latin.
- J. HOWARD GORE, B. S., PH. D.,
Professor of Mathematics.
- LEE D. LODGE, A. M., PH. D.,
Professor of French.
- D. KERFOOT SHUTE, A. B., M. D.,
Professor of Anatomy.
- FRANCIS R. FAVA, JR., C. E.,
Professor of Civil Engineering.
- THEODORE N. GILL, M. D., PH. D.,
Professor of Zoölogy.
- OTIS T. MASON, A. M., PH. D.,
Lecturer on Anthropology.
- CLEVELAND ABBE, A. M., PH. D.,
Professor of Meteorology.
- HERMANN SCHÖNFELD, PH. D.,
Professor of German.
- THE REV. J. MACBRIDE STERRETT, D. D.,
Professor of Philosophy.
- EDGAR FRISBY, A. M., U. S. N.,
Professor of Astronomy.
- WILLIAM C. WINLOCK, A. B.,
Professor of Astronomy.
- WILLIAM T. HARRIS, LL. D.,
Professor of Philosophy.
- EMIL A. DE SCHWEINITZ, PH. D.,
Professor of Bio-Chemistry.
- F. W. CLARKE, S. B.,
Professor of Mineral Chemistry.
- HARVEY W. WILEY, A. M., M. D., PH. D.,
Professor of Agricultural Chemistry.
- THE REV. FRANK H. BIGELOW, A. M.,
Professor of Solar Physics.
- ALEXANDER S. CHRISTIE, A. M., LL. M.,
Professor of Mathematical Physics.
- GEORGE P. MERRILL, PH. D.,
Professor of Geology.
- EXUM PERCY LEWIS, B. S.,
Junior Professor of Electrical Engineering.

In further organization of the School of Graduate Studies, the Board of Trustees report the following rules and regulations for the confirmation of the corporation, it being premised that certain typographical errors and omissions are here corrected:

RULES AND REGULATIONS OF GRADUATE SCHOOL.

The President of the Faculties is authorized to appoint temporary assistants and junior assistants for the term of one year or less, upon the nomination of the head of any school or department, until such time as their names can be reported to the Board of Trustees, at the next ensuing quarterly meeting, for its ratification in connection with such temporary appointment.

The teachers whose names are subjoined shall be appointed "The Board of Directors of Graduate Studies" in the University, and this Board shall be charged with the admission of students into the Graduate School and with all matters pertaining to the conduct and regulation of studies, examinations, &c., in the Graduate School, subject to the approval of the trustees or corporation :

James C. Welling, LL. D., President, and Professor of History.
 Charles E. Munroe, S. B., Dean, and Professor of Chemistry.
 The Rev. A. J. Huntington, D. D., Professor of Greek.
 Andrew P. Montague, A. M., Ph. D., Professor of Latin.
 The Rev. Samuel M. Shute, D. D., Professor of English.
 Theodore N. Gill, M. D., Ph. D., Professor of Zoölogy.
 Otis T. Mason, A. M., Ph. D., Lecturer on Anthropology.
 Cleveland Abbe, A. M., Ph. D., Professor of Meteorology.
 D. Kerfoot Shute, A. B., M. D., Professor of Anatomy.
 J. Howard Gore, B. S., Ph. D., Professor of Geodesy.
 Lee D. Lodge, A. M., Ph. D., Professor of French.
 Hermann Schönfeld, Ph. D., Professor of German.
 The Rev. J. Macbride Sterrett, D. D., Professor of Philosophy.
 The Rev. Frank H. Bigelow, A. M., Professor of Higher Mathematics.

The degree of Electrical Engineer and of Doctor of Philosophy shall be conferred on members of the Graduate School, after such examinations and under such regulations as shall be established from time to time by the Board of Directors of said school, with the approval of the trustees or corporation.

No graduate student shall be regarded as a candidate for any advanced degree until he shall have been formally admitted to such candidature by a vote of the Board of Directors.

Persons holding the degree of A. B. from reputable institutions shall be admitted to enter as candidates for the degree of A. M. and those holding the degree of S. B. be admitted as candidates for the degree of M. S.

Candidates for a Master's degree, to be eligible, shall pass one year at this University in the advanced study of at least one appointed subject ;

and shall sustain a satisfactory examination and present a satisfactory thesis on such subject.

Persons holding the degree of S. B. in engineering courses or their equivalent from reputable institutions shall be qualified to enter as candidates for the degree of C. E. and E. E.

Such candidates, to be eligible, shall pass one year in advanced study of engineering subjects in this University, shall sustain a satisfactory examination thereon, and shall present a satisfactory thesis.

The matriculation fee of candidates for Masters' or Engineering degrees shall be ten dollars (\$10.00) and the annual fee shall be the regular fee of the school in which the candidate may enter.

Persons holding degrees of Master in Science or Art or their equivalent from institutions of repute shall be deemed qualified to offer themselves as candidates for the degree of Ph. D.

Such candidates for the degree of Ph. D. shall undertake three topics for advanced study.

Such candidates, before being admitted to their candidature, shall pass a satisfactory examination in French and German, shall pay an examination fee of \$5 for the examination in each of these tongues, and shall pay a matriculation fee of ten dollars (\$10.00).

Such candidates shall pass two years in study at this University, shall sustain a satisfactory examination upon three subjects, which they may have elected, to wit, one major subject and two collateral minor subjects; shall present and print theses embodying the results of original research in their major subject; shall defend such theses before a board of experts, and shall accompany the said theses with an exhaustive bibliography.

The annual fee of candidates for a Doctor's degree shall be ninety dollars (\$90.00) where no laboratory courses are taken, and where laboratory courses are taken the fee shall be in excess of this sum, according to regulations prescribed by the Faculty with the approval of the corporation.

The matriculation fee shall be remitted in favor of candidates for the degree of Ph. D. who shall have taken the Master's degree in this University.

The fund accruing from matriculation fees paid by candidates for graduate degrees shall be held as a reserve fund from which to pay necessary expenditures of the Dean of the Graduate School for clerk hire in conducting necessary correspondence of the graduate department.

For expenditures thus incurred the Dean shall make requisition according to the necessity of the case, and account for such expenditures with appropriate vouchers.

The same rule which now obtains for the distribution and apportionment of fees in the Corcoran Scientific School shall also obtain in the administration of the Graduate School.

It gives me pleasure to state that all the Faculties of the University entered into this scheme of advanced instruction with unanimity and cheerfulness. The Medical Faculty, though most eager to join with the other Faculties in this advance movement, was arrested in its plans by the fact that as yet it has no laboratory for advanced chemical, biological, or bacteriological investigation. Without such laboratories it would be impossible to conduct graduate studies in medicine. With such laboratory the Faculty would enter on the work, not only with alacrity, but with enthusiasm.

I most cordially invoke for this Faculty such aid as you can give in providing them with the necessary equipment under these heads. Such equipment is required alike for undergraduate and for graduate instruction in medicine.

It will be observed that nothing has yet been said in regard to the organization of the School of Comparative Jurisprudence, as already authorized by the corporation. The policy of establishing such a school has been neither forgotten nor abandoned.

At the last meeting of the corporation of the University it was formally ordained—

"1. That a School of Comparative Jurisprudence, according to the plan already approved by the Corporation, be established as an integral part of our University system, and that the said School be formally organized during the coming year, *with a view to opening it at the beginning of the scholastic year 1893-'94.*

"2. That the President of the Faculties be authorized, in his projected sojourn in Europe, to visit the leading universities in which jurisprudence is taught according to the comparative method, and to collect all possible information under this head for the information of the Board."

In pursuit of the instruction contained in the latter of these resolutions, I visited London in the months of July and August last for the purpose of conferring with T. E. Scrutton, Esq., of the London bar, well known for his original researches in the origins of the common law, and with Sir Frederick Pollock, the distinguished professor of comparative jurisprudence in Oxford University. Both of these gentlemen received me with great courtesy, and both expressed the deepest interest in the establishment of such a school at Washington, where the reasons and the facilities for its establishment were admitted to be obvious.

As a result of these conferences in London the way was opened for similar conferences which I was to have with Rodolphe Dareste, with Max Leclercq, with V. Bogisic, and others, in Paris; with Professor Serafini in Pisa, with Professor Pacchioni in Modena, and with Francesco Ruffini in Turin, and especially with Professor Paul Vinogradoff, of the Imperial University of Moscow.

You already know that I was prevented from conferring with these masters of comparative jurisprudence. It is a source of lasting regret, as well for its cause as for its consequence, that the death of Professor Fristoe recalled me to Washington at the very threshold of my researches under this head; but the knowledge which I have gained was very valuable, and I shall be glad to place it at your command in the further prosecution of the enterprise.

As it is designed that the lectures of the School of Comparative Jurisprudence shall be held in the mornings or in the afternoons of each day, it is easy to see that certain of these lectures might be opened to students of the College proper. It would be difficult to estimate the stimulating influence which philosophical studies in this direction would exercise on the curriculum of the College in its senior courses of philosophy; and portions of these lectures in the case of College students who propose to study law would be preparatory to such professional study.

The lectures of the school would be open to all who are prepared to profit by them, but the degrees of the school, whether that of "Doctor of Philosophy" or "Doctor of Laws," would be reserved for those who, on the basis of an academic training and with at least a reading knowledge of the French and German tongues, should reach a certain required proficiency, as tested by examination, in the special studies of the school. Hence it is easy to infer the reflex influence which the School of Comparative Jurisprudence would also exert on the study of French and German, as also of Latin and Greek in the College and Corcoran Scientific School. Linguistic study in the undergraduate classes would be vitalized by the living uses to which it would be newly put in the graduate classes of the University.

The University Catalogue for the current year contains a brief description of the scope and object of the projected school. That

announcement has excited a wide public interest and has drawn inquiries from many quarters. I find room but for two from opposite sections of the Union :

NEW YORK, *April 18, 1893.*

Pres't JAMES C. WELLING.

DEAR SIR: I received your catalogue, and in perusing it was very much interested in the account of the newly projected "School of Comparative Jurisprudence," and for my own part I would say that I would gladly spend several years longer in order to gain a knowledge of the law as a science and not merely as a professional study. I would therefore like to be informed on three matters: Firstly. To become a candidate for the degree of Doctor of Philosophy in law, is said candidate required to be a college graduate—*i. e.*, one who has the degree in Arts, Science, Philosophy, or Letters? Secondly. What, in your opinion, will be the requirements for admission as a candidate for the aforementioned degree? Thirdly. How long will be the course? By answering these queries you will confer a favor upon

Yours truly,

HENRY WALDMAN.

No. 168 Rivington street, New York city.

WICHITA, KANSAS, *April 21, 1893.*

DEAR SIR: The catalogue was received yesterday, for which you will please accept many thanks. I have heard of your Law School as being one of the foremost in the country, and it seems to me the proposed course for Ph. D. in jurisprudence stamps it as such. I would be glad to learn of the course when inaugurated.

Most respectfully yours,

J. S. CARSON,
Principal Park School.

More than two hundred years ago the advantages of such studies in law were perceived by philosophical writers on jurisprudence. Lord Stair, of Scotland, the author of the "Institutes," etc., held the following language:

"I did resolve to raise my thoughts to a distinct consideration of the fountains and principles of the peculiar laws of all nations. * * * No man can be a knowing lawyer in any nation who hath not well pondered and digested in his mind the common law of the world, from whence the interpretations, extensions, and limitations of all statutes and customs must be brought."

The anthropological studies of the present day, in facilitating investigations of this kind, have, at the same time, made such investigations a necessity for the advanced study of law.

Referring to the regular operations of the University in its several departments during the last scholastic year, I have to report that a good degree of prosperity has waited upon us, notwithstanding the fact that the outgoing year of each administration of the Federal Government is expected to work some reduction in our local patronage. The statistics of the separate schools are as follows :

Students in the Preparatory School	74
Students in the Arts and Sciences.....	236
Students of Medicine.....	161
Students of Dentistry	46
Students of Law	348
Total	<hr/> 865

A few weeks before the opening of the Preparatory School it was discovered that the health of its accomplished and efficient principal, Professor Andrew P. Montague, would not be sufficiently restored to justify him, under the advice of his physician, in resuming his duties in connection with the school during the whole of the year. It became necessary, therefore, to make immediate provision for meeting the emergency thus created, and Mr. J. J. Chickering, a graduate of Amherst College and an experienced teacher at the head of one of the Public Grammar Schools of Washington, was, on my nomination, appointed by the Board of Trustees Associate Principal, with the understanding that in the absence of Professor Montague he would take the direction of the school. Since Professor Montague's return to Washington he has given such attention to the operations of the school as was found practicable, and I am glad to report that he hopes to be able to resume his place at its head at the beginning of the next scholastic year. This arrangement will necessitate some readjustment of teachers and of teaching courses in the school.

The sudden death of Professor Fristoe, soon after the date of your last annual meeting, called the Board of Trustees, in the midst of the sorrow created by that great loss, to take immediate measures for meeting the exigency. Professor Fristoe's duties were manifold. He was not only the teacher of chemistry in the College, in the Medical School, in the School of Dentistry,

and in the Corcoran Scientific School, but was also the Dean of the last-named Department. He brought to the discharge of all his duties a zeal which never flagged and a benignity of temper which sustained him under every burden. Appropriate public exercises were held, under the auspices of the University, on the 16th of December last, in tribute to his memory and in grateful recollection of his long and faithful services.

It soon became apparent that in the new direction which was to be impressed on the operations of the University, especially under the head of graduate work, it would become necessary to make a redistribution of the chemical and administrative duties which had previously been performed by Professor Fristoe. After much study of the problem, after taking the advice of my colleagues in the Medical School, in the College, and in the Corcoran Scientific School, and, I may add, after conferring with eminent chemical experts in Washington and elsewhere, I brought to the consideration of the Board of Trustees the following suggestions:

That Professor Charles Edward Munroe, S. B., Chief Chemist of the United States Navy, should be appointed Professor of Chemistry in the College and in the Corcoran Scientific School, and that he should also be the Dean of the Corcoran Scientific School;

That Professor Emil A. de Schweinitz, Ph. D., of the United States Department of Agriculture, should be appointed Professor of Chemistry and Toxicology in the Medical and Dental Schools;

And that Professor Henry Carrington Bolton, Ph. D., of New York, should be appointed non-resident Lecturer on the History and Philosophy of Chemistry.

These nominations were approved by the Board of Trustees at a meeting held on the 28th of September, and I now invite for that approval, and for the arrangements which were then concerted in the matter of salaries, the confirmation of the corporation. In the science of General Chemistry Professor Munroe has no superior in the United States, and in some specialties he is without a rival. His administrative faculty is also of the first order. The original researches of Professor De Schweinitz in the Department of Agriculture sufficiently attest his learning and his ability, while the honorable record of Professor Bolton, alike

because of his learning as a Chemical teacher and because of the unique range of his special studies in Chemical bibliography, has made his name well known among chemists throughout the world.

I should not omit to state that in the month of March last Dr. Bolton delivered nine lectures under the auspices of the University on the History of Chemistry from Bible times down to the present day. The lectures were opened to the public and were attended by large and appreciative audiences.

There has been a slight decline in the number of students in the College during the last year, but there has been a great increase in the number of the lecture courses. The chair of Physics, previously merged with that of Chemistry, has been erected into a distinct School, while the School of Philosophy has been divided between Dr. Sterrett and the President of the University. The accession of Dr. Sterrett to the chair of Philosophy has lent a new stimulus to the special studies of this School. A Society of Philosophical Inquiry, formed under his presidency, has been organized in connection with the University and meets weekly for the discussion of fundamental problems in speculative thought as distinct from scientific investigation.

It is respectfully recommended that the title of Professor Howard L. Hodgkins shall hereafter be Professor of Physics and Adjunct Professor of Mathematics.

I need but call your attention to the enlargement and improvement of the Lecture courses in the Corcoran Scientific School. The attendance here has been in excess of that of former years. Through the energy of the new Dean important additions have also been made to the illustrative apparatus of the School; but the School still pines for the want of the necessary implements of education. With an addition to its class-room facilities the number of its pupils could easily be doubled—in many departments the number could be quadrupled. Professor Harry King having resigned the chair of Drawing in the school, I respectfully recommend that he be appointed Emeritus Professor of Drawing, in grateful recognition of his long and faithful service, and that Josiah Pierce, C. E., be appointed Professor of Drawing and of Applied Mathematics in his stead.

I may specially call your attention under this head to the

wants of the Department of Drawing and of Applied Mathematics. In this Department, besides making provision for free-hand drawing, modelling, mechanical drawing, architectural drawing, and topographic drawing, it is proposed to teach the elements of coördinate geometry by object lessons in projection, and by the development of lines and surfaces from their equations. The learned teacher, Professor Josiah Pierce, Jr., a graduate of Emmanuel College, Cambridge (England), simply awaits the necessary appropriations to undertake this promising enterprise.

The Medical and the Dental Schools have been remarkably prosperous during the last year. Both schools have been called to mourn the loss of the learned and faithful Professor of Physiology, the late Dr. William Lee, who died on the 3d of March last. Dr. Lee was a native of Massachusetts, but by long residence had established for himself a distinguished place in the medical faculty of Washington. He had an inquiring mind and was addicted to original research in the cause of medical science.

At the Medical and Dental Commencement, held on the 4th of May last, thirty-two graduates received the degree of Doctor of Medicine and four the degree of Doctor of Dental Surgery. As has been already said, the Medical School needs a chemical and bacteriological laboratory as an indispensable appliance in the administration of its lecture courses and as the indispensable prerequisite of that original research on which its Faculty are waiting to enter.

The Law School still maintains its supremacy among the law schools of Washington and, in the learning and distinction of its professors, yields to none in the whole country. Mr. Justice Harlan has been absent during the greater part of the year in attendance on the "Fur-Seal Arbitration" at Paris. You are already aware that he is a member of the high tribunal charged with this international adjudication. His professorial duties have, during his absence, been most acceptably performed by his colleague in the Law Faculty and on the bench of the Supreme Court, Mr. Justice Brewer.

The arrangement made by the corporation at its last annual meeting for the improvement of legal instruction by providing a special chair for the conduct of daily "quizzes," in review of the

text-book lessons and of the lectures, has proved invaluable, and the administration of the chair by Professor William G. Johnson has been worthy of the highest commendation. By this catechetical analysis the student is called to reproduce and to expound with clearness and promptitude the principles of law which he has learned both from the text-books and the lectures. In this way, too, the principles of law are impressed on the memory of students, while difficult points are explained anew in view of any confusion which may be brought to light by question and answer.

I regret to announce that Professor Henry E. Davis, LL. M., has resigned his chair as Professor of Common Law Practice in the Graduate School of Law. This is a source of profound regret to his colleagues in the Law Faculty and to all the students of the Law School. Mr. Davis is not only learned in the Common Law and in its sources, but is also a ripe scholar in that comparative jurisprudence which is coming more and more to give form and direction to all advanced studies in law. I am glad to announce that he still consents to deliver his annual course of lectures on the History of Law.

I respectfully recommend the adoption of the following regulation:

Annual examinations for degrees in the Law School shall be closed three weeks before the date of the Law School Commencement, and the names of successful candidates for degrees shall be reported to the President of the Faculty two weeks before the date of the said Commencement.

The students in our Law School are now so numerous that the analysis of the written examinations is a work of time as well as labor. The names of the successful candidates should be reported two weeks before the date of the Commencement in order to afford a sufficient interval for the Commencement preparations. As the annual report of the President of the Faculties has to be printed and sent to each member of the corporation one week in advance of the annual meeting, and as the annual budget has to be prepared at the same season, you will see at once the embarrassment under which he labors in preparing such reports while the materials which compose them are in process of formation, and while he is himself in the midst of

manifold executive duties connected with the Annual Commencements of the several departments.

I respectfully suggest that the annual budget adopted at the Annual Meeting in June, on the basis of estimates which are partly conjectural, shall be subject to revision at an adjourned meeting of the corporation to be held on or about the first of January in each year.

The following degrees have been conferred by the University in its several departments at the close of the scholastic year 1892-'93. I am unable to recite these degrees in connection with an account of the Commencements, because in the case of all the departments except the Medical and the Dental Schools this report must go to press before the Commencements are held:

In the Medical School:	
Doctors of Medicine	32
In the Dental School:	
Doctors of Dental Surgery.....	4
In the Corcoran Scientific School:	
Civil Engineer.....	1
Bachelor of Science	6
In the Columbian College:	
Master of Arts.....	2
Bachelor of Arts	4
Bachelor of Science	5
In the Law School:	
Master of Laws.....	58
Bachelor of Laws.....	98

The University during the last year made a beginning in the work of publishing the results of original research and of independent inquiry conducted under its auspices by its Faculty or students. Other papers are awaiting publication so soon as a Publication Fund shall be provided. This field is exceedingly rich in its promise, for the harvest is great and the laborers at our command are not few.

In compliance with the mandate of the corporation, I addressed a memorial to Congress at its last session, praying for an amendment to our charter in the matter of the conditions pre-

scribed for eligibility to the offices of Secretary and Treasurer of the University. Mr. Mattingly, the counsel of the University, kindly drafted the amendment, and, as passed, it is as follows :

AN ACT to amend the act of March 3, 1873, for the relief of the Columbian University, in the District of Columbia.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act approved March 3, 1873, entitled "An act supplemental to the act of February 9, 1821, incorporating the Columbian College, in the District of Columbia," be, and the same hereby is, so modified that hereafter the treasurer and secretary of said corporation, the Columbian University, need not be one person nor a member of the trustees of said corporation, but the trustees and overseers of said corporation, in convention assembled, shall annually elect by ballot two suitable persons from among the trustees or not, as they may deem proper, one to be treasurer and the other secretary of said corporation and of the Board of Trustees.

SEC. 2. That in case of the death, resignation, or inability to act of either the treasurer or secretary, the Board of Trustees shall have power to fill the vacancy until his successor is duly elected.

Approved January 14, 1893.

As the reasons which induced me to undertake for a time the duties of the office of Acting Secretary and Treasurer, in addition to my other cares, are removed by this amendment, I now beg leave to resign that appointment. The active duties of the office have been performed, and most faithfully performed, during the last year by Mr. Robert H. Martin, the Financial Agent. Under his administration the business interests of the University have been promoted and its accounts have been systematically kept.

The amendment to the charter requires that the election of Treasurer and of Secretary shall be "by ballot," as in the case of all other officers of the corporation. I trust that I shall not trespass on the proprieties of this regulation by formally bringing the name of Mr. Martin to your consideration in connection with the office of Treasurer. Under the terms of the amendment the duties of the office of Treasurer cannot be longer joined with those of Secretary. It will remain for the corporation to elect, "by ballot," some suitable person to perform the duties of the latter office.

I should perhaps call your attention to the fact that the last Congress, after reciting that large libraries and large collections illustrative of the arts and sciences have been gathered at the National Capital "to promote research and the diffusion of knowledge," proceeded by a joint resolution approved April 12, 1892, to place these unequalled facilities at the command of institutions of higher education in Washington. The joint resolution was not needed to prompt the willing minds of the directors and custodians placed in charge of these treasures, but it affords gratifying evidence of the friendly disposition of the Government, both legislative and executive, under this head. The terms of the resolution are as follows:

"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the facilities for research and illustration in the following and any other governmental collections now existing or hereafter to be established in the city of Washington for the promotion of knowledge shall be accessible, under such rules and restrictions as the officers in charge of each collection may prescribe, subject to such authority as is now or may hereafter be permitted by law, to the scientific investigators and to students of any institution of higher education now incorporated or hereafter to be incorporated under the laws of Congress or of the District of Columbia, to wit:

1. Of the Library of Congress.
2. Of the National Museum.
3. Of the Patent Office.
4. Of the Bureau of Education.
5. Of the Bureau of Ethnology,
6. Of the Army Medical Museum.
7. Of the Department of Agriculture.
8. Of the Fish Commission.
9. Of the Botanic Gardens.
10. Of the Coast and Geodetic Survey.
11. Of the Geological Survey.
12. Of the Naval Observatory."

I invite your attention to the enlarged catalogue of the University in its current edition, and to the more compact form in which it has been issued. Its present form is that of most catalogues of the larger universities in the country, and seemed to be required by the increased contents of this annual publication. The change was made with the approval of the Academic and

Scientific Faculties, under whose general direction the annual catalogue is compiled.

At each new advance which the University has made in pursuance of its broader plans of education, the corporation has given a public entertainment of some kind for the purpose of giving publicity to its designs. On the 24th of March, 1873, a grand banquet was given at Wormley's Hotel in celebration of the new charter granted by Congress and in promotion of "the new University movement." The banquet was attended by President Grant and members of his Cabinet; by distinguished members of the Diplomatic Corps; by officers of the Army and Navy, and by eminent invited guests from different parts of the country. In responding to the first toast, "The Columbian University," the President of the Faculties explained at length the reason and ground of the new movement "considered in its relation to Washington as a great educational centre"; the Attorney-General of the United States (the Hon. George H. Williams) spoke for "the Law side of the University"; Professor Joseph Henry, secretary of the Smithsonian Institution, spoke for "Science," avowing his hearty sympathy with the plans of the Columbian University; Charles Astor Bristed spoke for "the Classics"; the Hon. William Beach Lawrence, LL. D., D. C. L., for "the Gladsome Light of Jurisprudence," and the Marquis de Noailles, the French minister, for the "Communion of Scholars in the Republic of Letters."

On the 11th of March, 1844, an entertainment was given under the auspices of the University in announcement of the approaching occupation of the new University building and the opening of the Corcoran Scientific School. At this celebration addresses were made by the President of the University; by the Hon. John D. Long, of Massachusetts; by the Hon. J. Randolph Tucker, of Virginia, and by the Hon. John M. Gregory and Professor Simon Newcomb, of Washington.

As the erection of the School of Graduate Studies is the most signal event that has ever occurred in our history and marks the culmination of an upward movement which has now run through many years, it seemed proper to give some public notification of "the new departure." After conference had with members of the Board of Trustees, and after authority received

from the Executive Committee of the University, it was determined to give a public reception to the new Faculty in the University building, and to invite to that reception the friends of the University in different parts of the country, the clergy and leading citizens of Washington, and all the Commissioners in attendance on the General Assembly of the Presbyterian Church. The reception was given on the 25th of May, while the General Assembly was in session, because, if given at that date, it would enable the University to pay a deserved tribute of respect to a large company of Christian scholars coming from every part of the land, and because it enabled these strangers to get an interior view of the great educational resources which are at our command. As many as fifteen hundred guests were present.

I need not remind you of the loss which the University has sustained in the death of our beloved friend and colleague, the late James H. Cuthbert, D. D., the vice-president of the corporation and the chairman of its Executive Committee. He fell asleep at Aiken, S. C., on the 6th of May. But for the uncertainty in which I was left for several days concerning the circumstances of his death and the date and place of his burial, I should have summoned you in extraordinary session to take appropriate action in testimony of your affectionate regard for one whom you could but love while he was living and whom you can but mourn now that he is no more. The sweet serenity of his death was in perfect keeping with the sweet serenity of his life.

All which is respectfully submitted.

JAMES C. WELLING, *President.*

THE COLUMBIAN UNIVERSITY, *June 10, 1893.*

REPORT OF DEAN OF CORCORAN SCIENTIFIC SCHOOL.

THE COLUMBIAN UNIVERSITY, DEPARTMENT OF CHEMISTRY,
WASHINGTON, D. C., *June 8, 1893.*

DR. J. C. WELLING,
President of the Columbian University.

SIR: I have the honor to render the following report on the condition of the Corcoran Scientific School during the academic year 1892-1893:

Owing to the death of my distinguished and lamented predecessor, Dr. E. T. Fristoe, I was called to the Professorship in Chemistry and the Deanship of the School in November, 1892. As the term work of the School was already well advanced on my arrival, and as there had necessarily been some uncertainty as to when and to what extent instruction in chemistry would be given, the attendance in this department of the School has been smaller than might have been the case had there been no interruption in the course, but I feel warranted in saying that in all other respects the year ending June, 1893, has proved the most successful one in the history of the School. This opinion is founded on the inspection and comparison of the following data:

1.—*Number of Students in Corcoran Scientific School.*

1885	26
1886	71
1887	78
1888	84
1889	82
1890	109
1891	110
1892	139
1893	174

2.—*Receipts for Tuition.*

1885	\$3,569 35
1886	5,390 34
1887	4,113 25
1888	3,488 04
1889	4,016 49
1890	3,596 38
1891	4,386 37
1892	5,920 98
1893	7,132 04

These are the material evidences of success; but there are many other evidences which are even more encouraging, and chief among them is the number of students entering for degrees. I am unable to obtain the data bearing upon this point for previous years, so that no exact comparison can be instituted; but from the traditions of the School and by inference from the past reports of the Dean, I learn that the number is considerably larger than in any previous year in our history. The numbers are shown in the following table:

Candidates for Degrees.

Doctor of Philosophy -----	3
Master of Science -----	2
Civil Engineer -----	19
Electrical Engineer -----	8
Bachelor of Science -----	14
Total -----	46

This increase may be partly accounted for by the increased value placed on our diplomas and partly by the fact that it is the present policy of the Faculty to encourage students on entering the School to become candidates for degrees, as this action not only inspires them with a more definite aim, but induces them to persist in the prosecution of their studies when they are tempted to abandon them. Whatever the cause of this increase may be, the consequence is that it removes some of the elements of uncertainty attending the administration of the School, since we may anticipate that the attendance in a subsequent year will not fall below a certain minimum, and we can therefore make our estimates for supplies and our provisions for instruction upon some definite basis.

Another advance which has been made is in the organization of several courses of study leading to the degree of Bachelor of Science, there being in all eight such courses established, viz: General Science, Civil Engineering, Electrical Engineering, Analytical Chemistry, Physical Chemistry, Meteorology, Geography, and Geology. This is not the first time that an attempt has been made to introduce systematic courses of correlated and interdependent studies into the School, but it is believed that the obstacles which have prevented the complete success of this plan in the past have been surmounted by increasing the number of instructors and of departments and by developing and extending the studies within the departments. Acting on this belief, we have increased the number of instructors from 17 to 43, while the number of departments has been increased from 12 to 18, the newly created subdepartment of Spanish not being included in this enumeration. The number of courses of studies within the departments has been increased from 30 to 116. A large part of the newly appointed instructors are young men, many of them having been graduated at this School, and each of them having been selected for

his special attainments in and aptitude for teaching the particular subject confided to his charge. A good proportion of these men have been engaged in the work during the year just ended, and they have brought to their work a zeal, an enthusiasm, and a belief in the School which cannot fail to lead to success.

Besides the establishment of these special courses, the time required for the attainment of the Bachelor degree has been extended to four years, and for the Engineering degrees to five years. By these changes we bring the standard of the School up to that of any and above that of most institutions conferring these degrees.

The work of the year, as in past years, has, however, been principally devoted to the special students. The following table shows how this work has been distributed among the various departments:

Students in Different Departments.

Mechanical Drawing	41
Topographical Drawing	19
Analytical Chemistry	11
General Chemistry	15
Assaying	3
Electricity	20
Physics	56
Astronomy	2
Botany	2
Anthropology	2
Zöology	2
English	38
French	31
German	35
Latin	7
Geology	12
Mineralogy	4
Civil Engineering	28
Architectural Drawing	28
Mathematics	86
Philosophy	8

It will be observed that the largest number of students are in attendance on the Mathematical Department, and this will probably continue to be the case, since mathematics is common to all courses and required in every year for six of the courses of study leading to the Bachelor's degree. The work performed by the instructors is not, however, to be measured by the relative number of pupils taught, the time required for preparation and the labor involved in teaching being practically the same for a class of one pupil as for a class of twenty pupils, while a lecture course may be given to as large a class as the room will accommodate.

Under our present system, which seems to be the only practical one which will meet the conditions of the case, while no instructor receives an adequate salary, the majority receive a trivial sum, which is in no sense an equivalent for the work done, though their studies constitute important and essential links in the whole system. The only means by which this injustice can be remedied is through the securing of endowments, and I do not hesitate to urge that active and unremitting efforts be made to secure such endowments, for I do not know of any place where the necessary sum of money could be used to greater advantage, or where it would yield so certain, so immediate, and so large a return.

I have been connected with several of our older and richer institutions of learning and have had opportunities for knowing what they are doing with the wealth at their command, and I have consequently been amazed to learn that it has been possible here to do the work this School has done, to maintain a Faculty of the size, character, and attainments which the Faculty of this School possesses, and to provide the materials and appliances necessary for instruction on a total annual income which at its maximum has never equalled the annual salary of a single professor in Columbia College, and which is equal to but one-third of the sum expended in the education of each cadet who is graduated from the United States Naval Academy. Of course, such results have been achieved here only through the self-sacrificing devotion of the members of the Faculty, and it would seem to be sufficient only to lay the record of this School and the educational needs of this community before some generous patron of education to secure the moderate sum required; for the record of the School is a guarantee that his benefaction will be wisely administered and will accomplish great good.

We have during the past year received the following gifts:

A Crawford gold mill, presented by the Mechanical Gold Extractor Company;

A Lundell electric motor, presented by the Interior Conduit and Insulation Company, and

A set of chemical charts, presented by Dr. H. Carrington Bolton,

While we have been promised—

An electric dynamo by the General Electric Company;

A large collection of very valuable organic dyestuffs by the Treasury Department,

And certain sums of money (amounting to \$500) by several persons whose names cannot yet be announced, for the purchase of books for special departments.

I desire here to record our sincere and earnest thanks to the generous givers of these valuable gifts, and to express the hope that this is but the beginning of the donations which are to be made to the equipment of the school.

Very respectfully submitted.

CHARLES E. MUNROE,
Dean Corcoran Scientific School.